FIG. 1

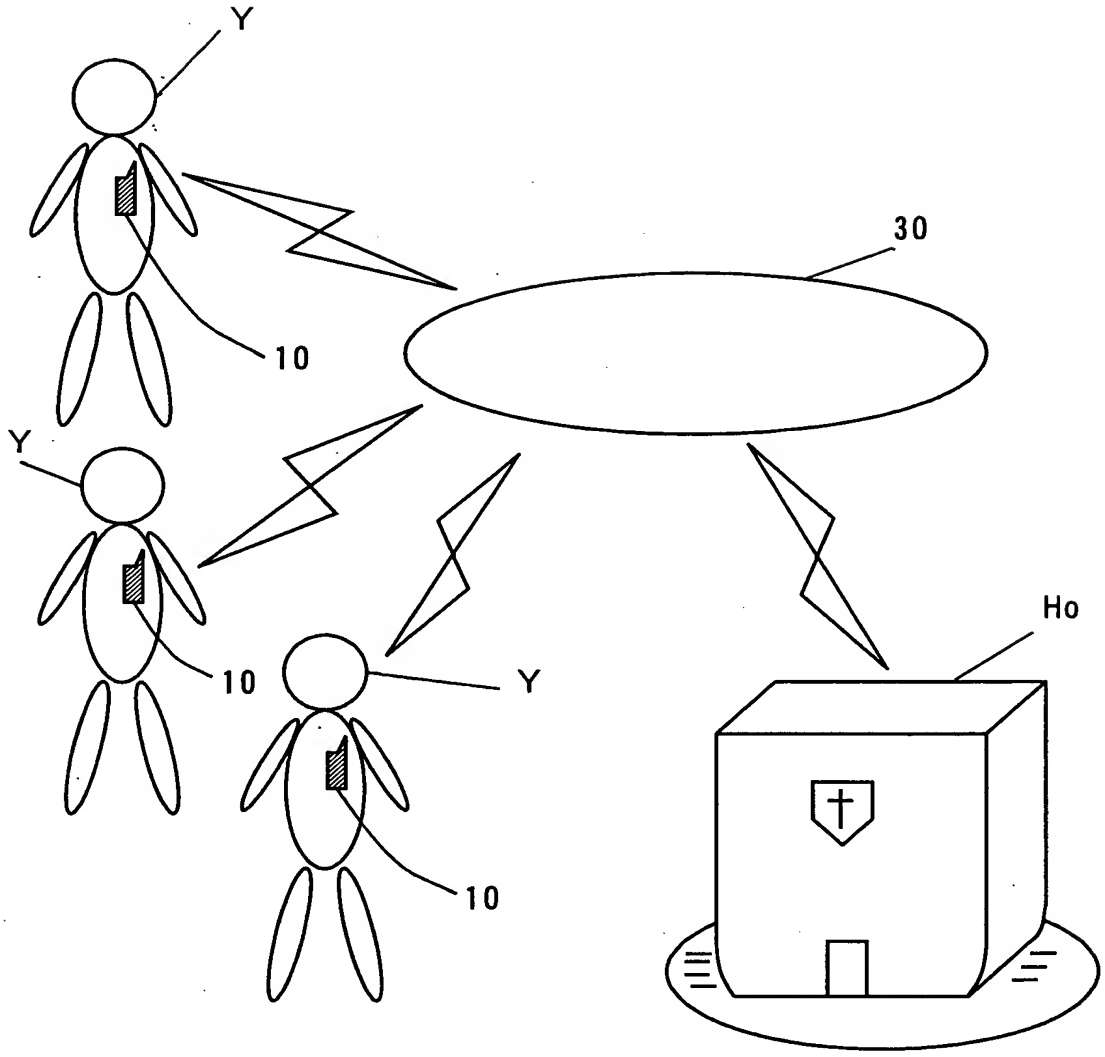


FIG. 2

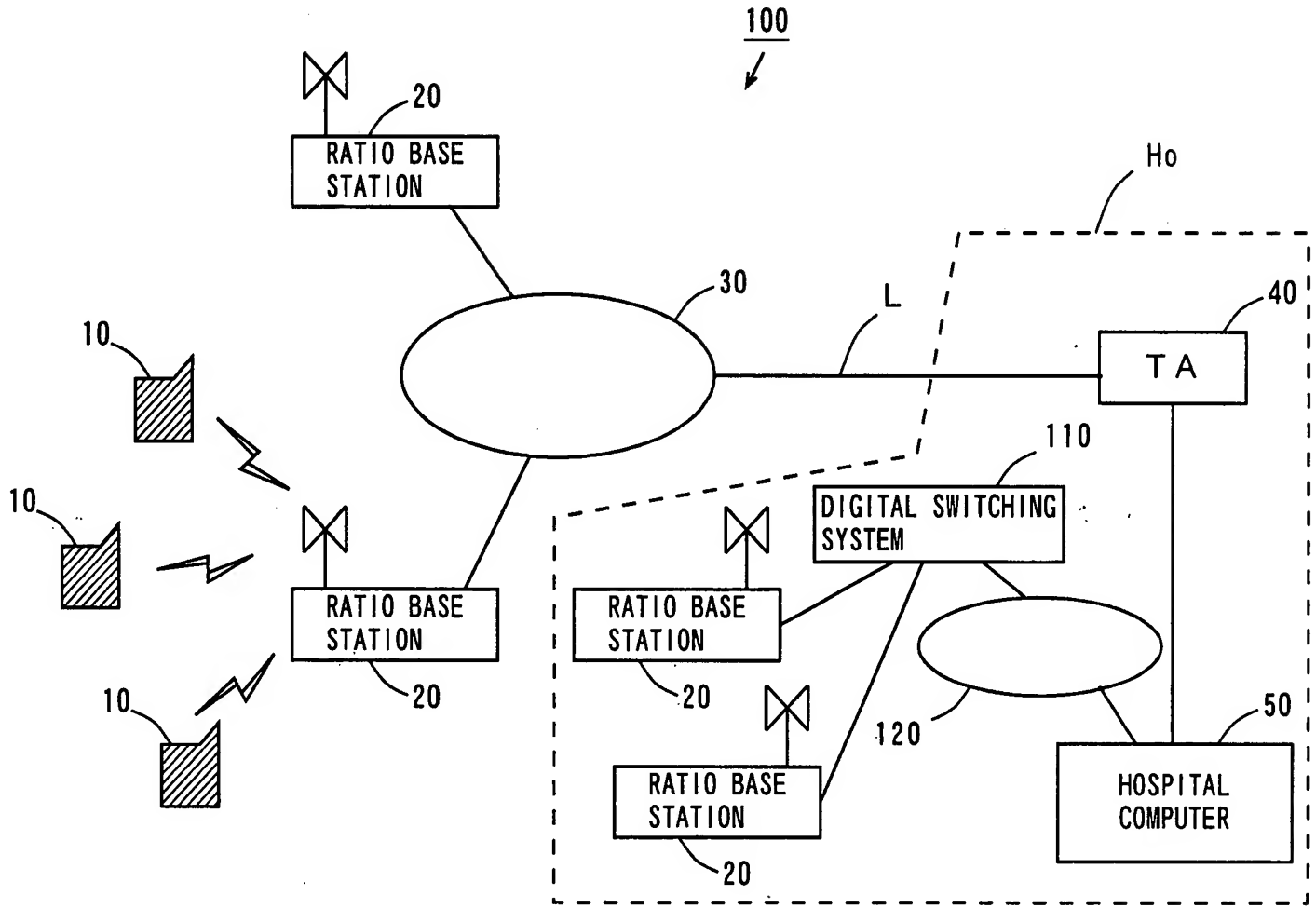

100
20
RATIO BASE STATION
Ho
30
L
40
TA
10
10
10
110
DIGITAL SWITCHING SYSTEM
RATIO BASE STATION
20
RATIO BASE STATION
20
120
50
HOSPITAL COMPUTER
RATIO BASE STATION
20

FIG. 3

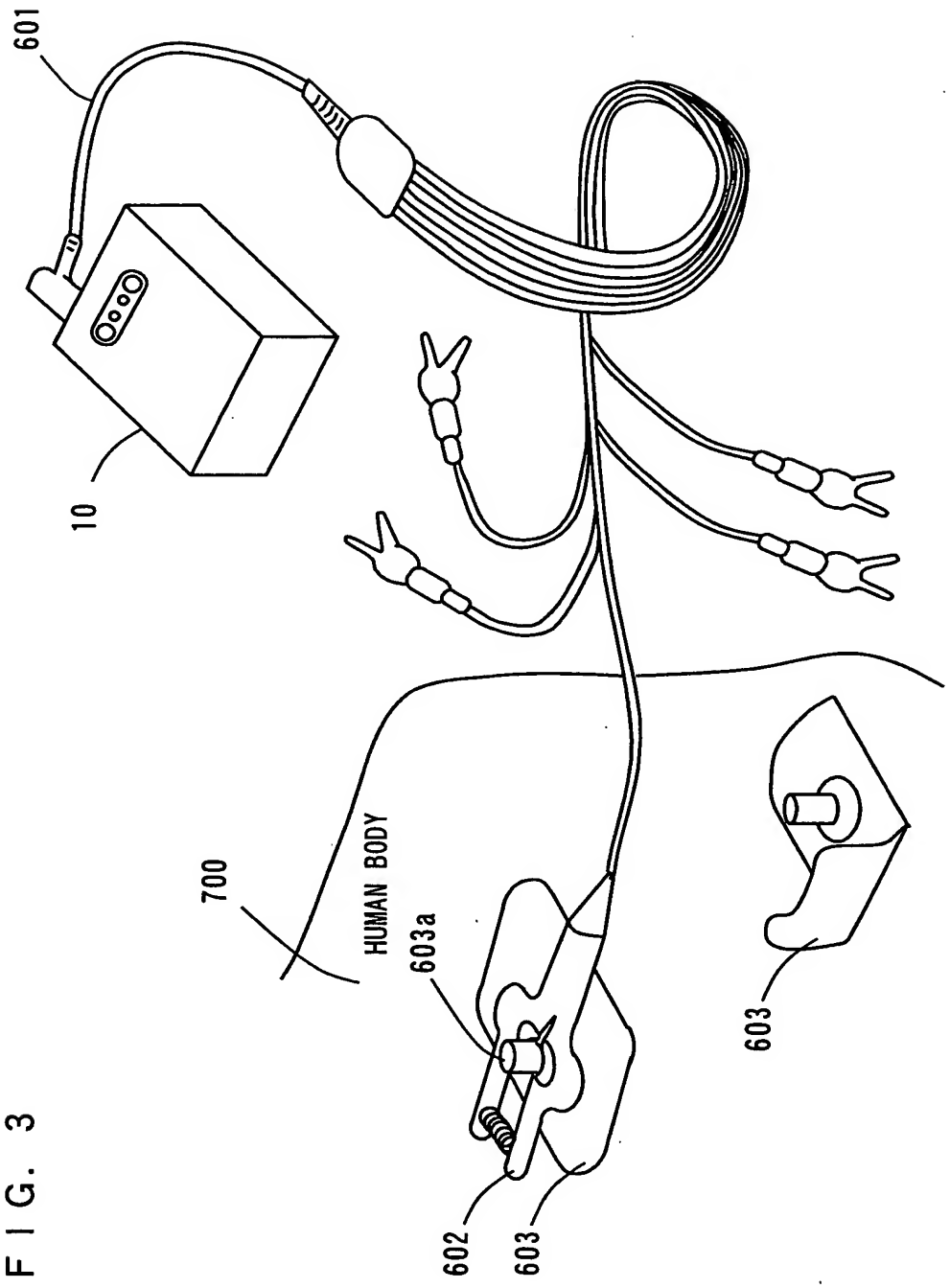


FIG. 4

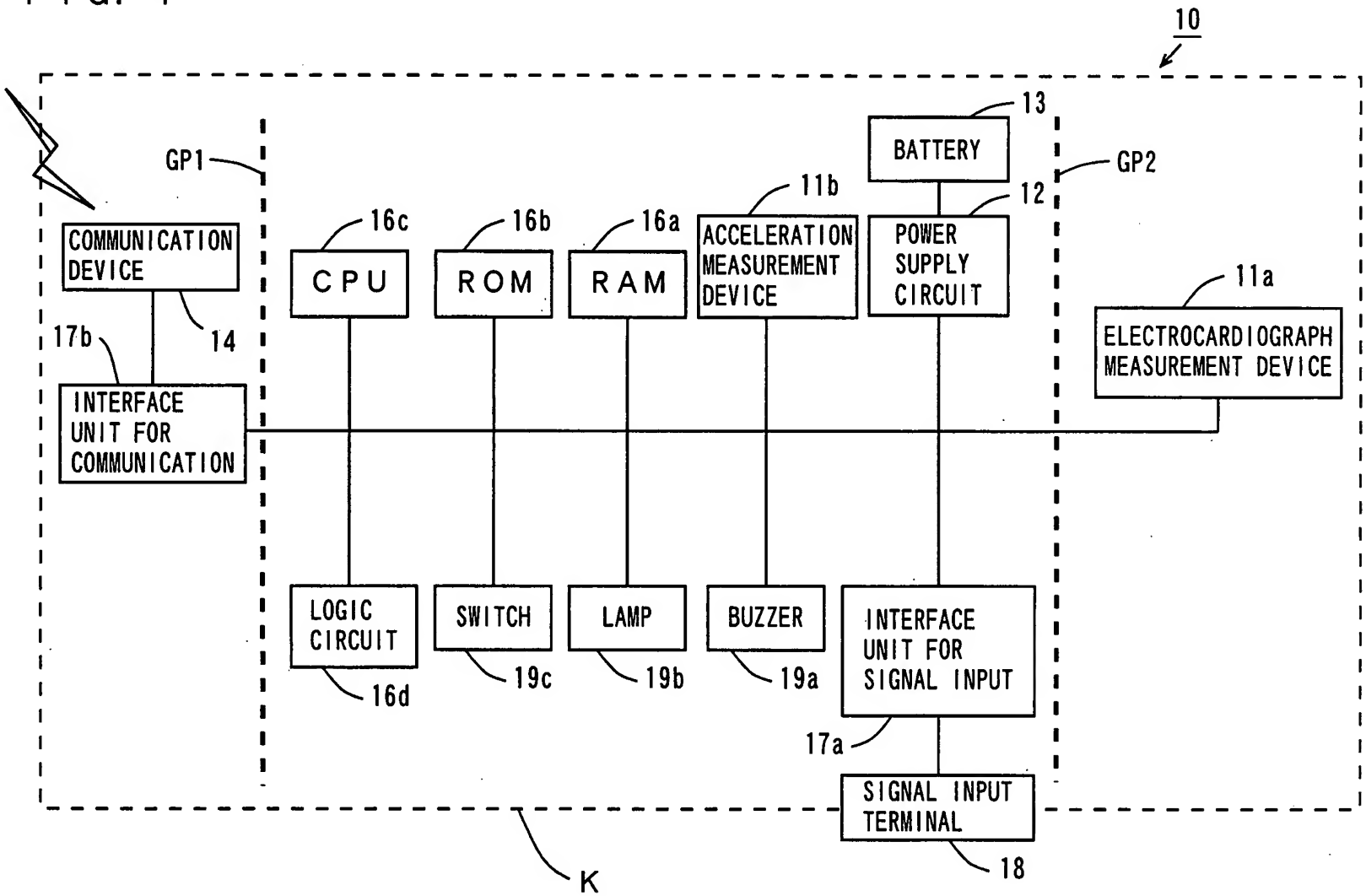

10
GP1
GP2
COMMUNICATION DEVICE
14
17b
INTERFACE UNIT FOR COMMUNICATION
16c
CPU
16b
ROM
16a
RAM
11b
ACCELERATION MEASUREMENT DEVICE
13
BATTERY
12
POWER SUPPLY CIRCUIT
11a
ELECTROCARDIOGRAPH MEASUREMENT DEVICE
LOGIC CIRCUIT
16d
SWITCH
19c
LAMP
19b
BUZZER
19a
INTERFACE UNIT FOR SIGNAL INPUT
17a
SIGNAL INPUT TERMINAL
18
K

FIG. 5

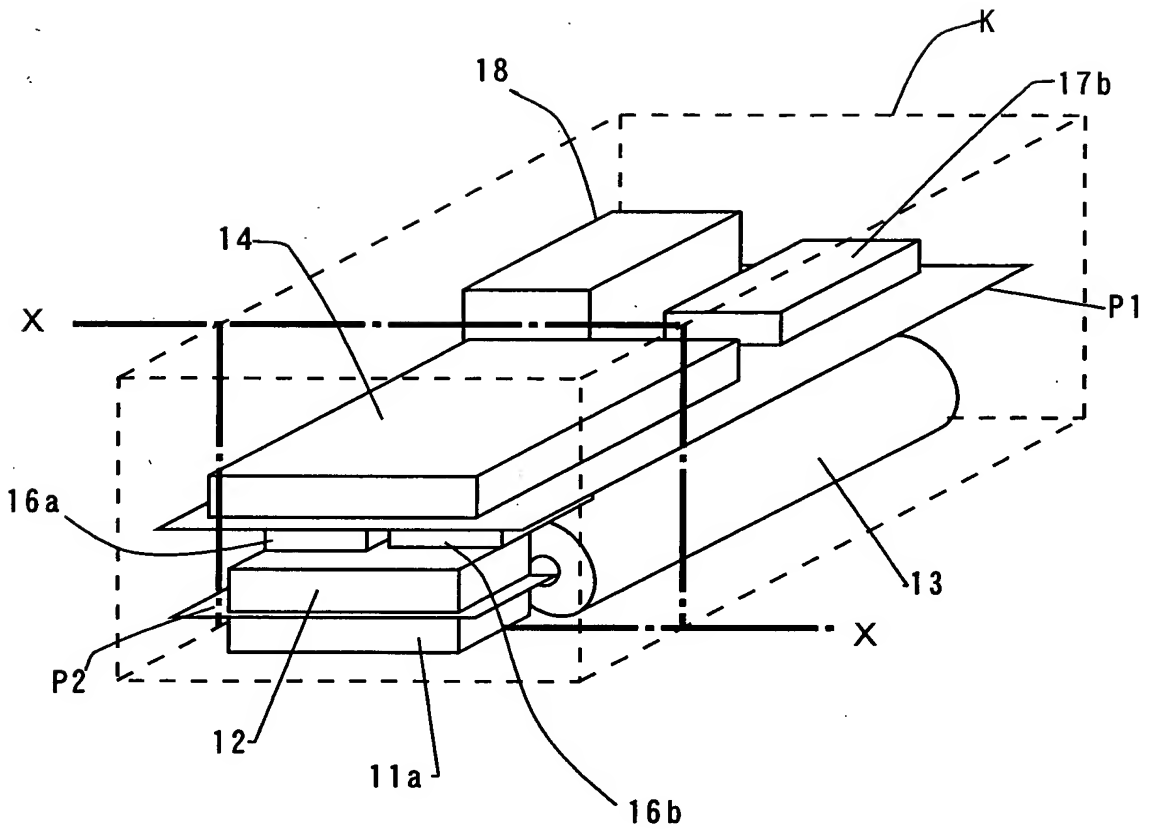


FIG. 6

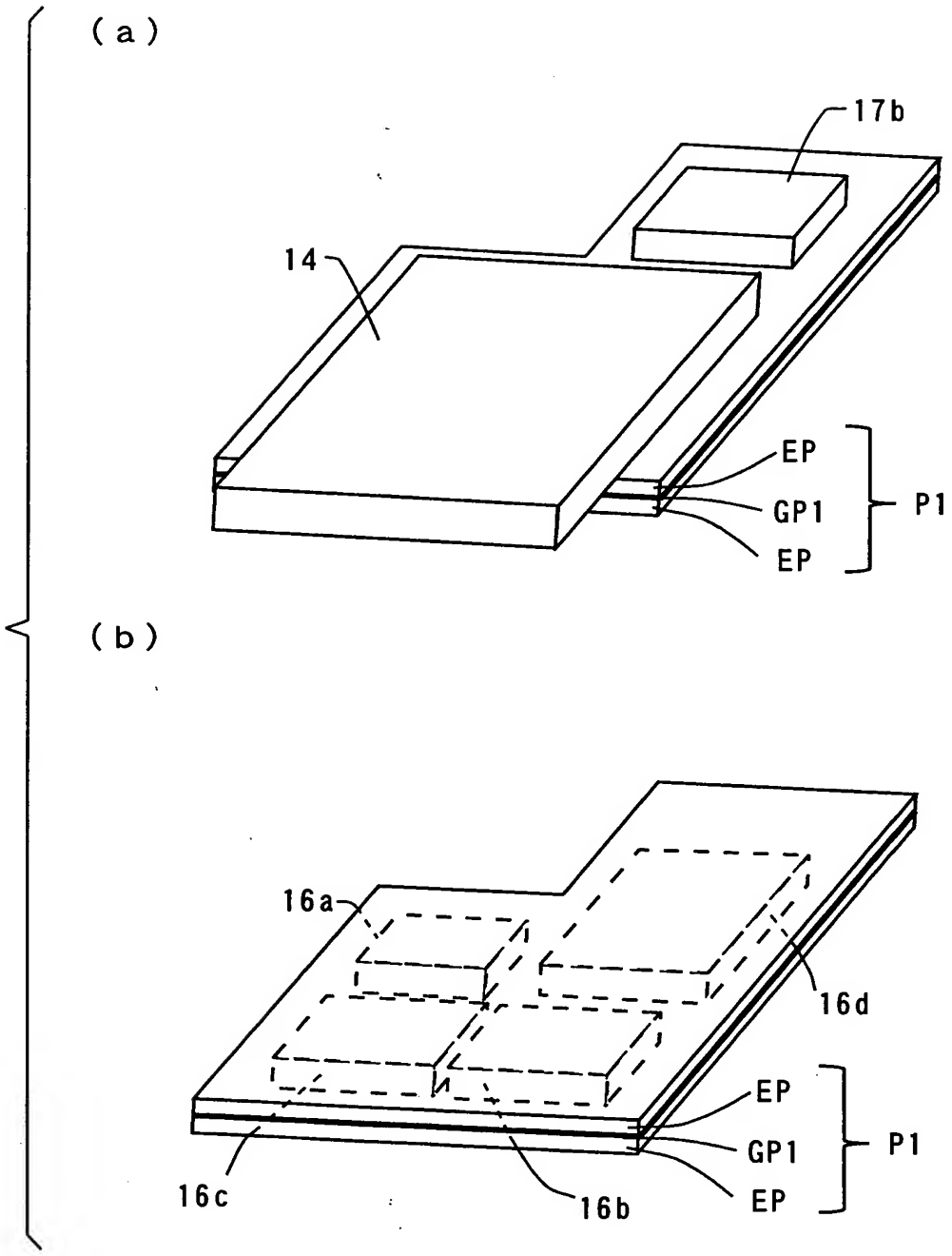


FIG. 7

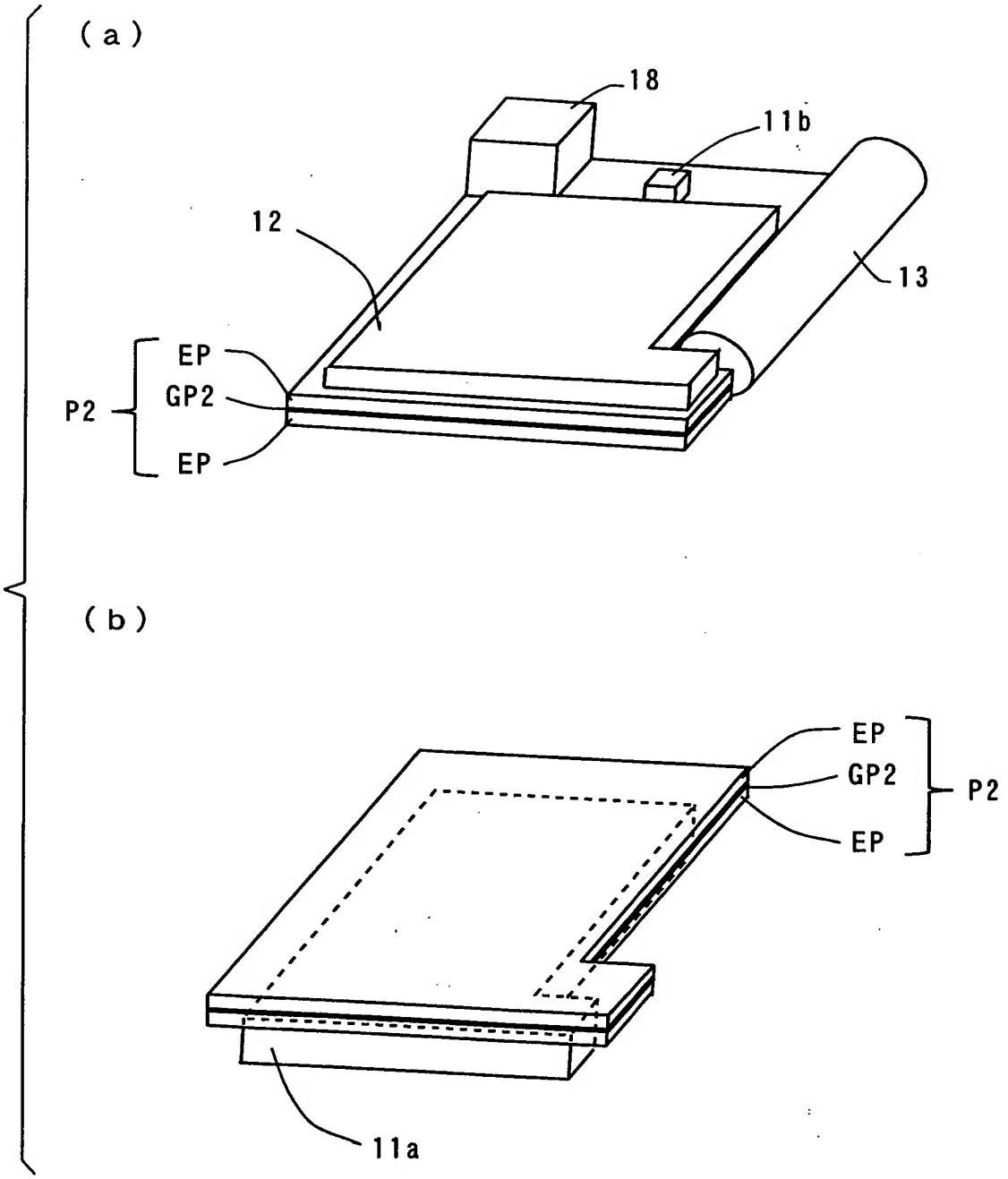


FIG. 8

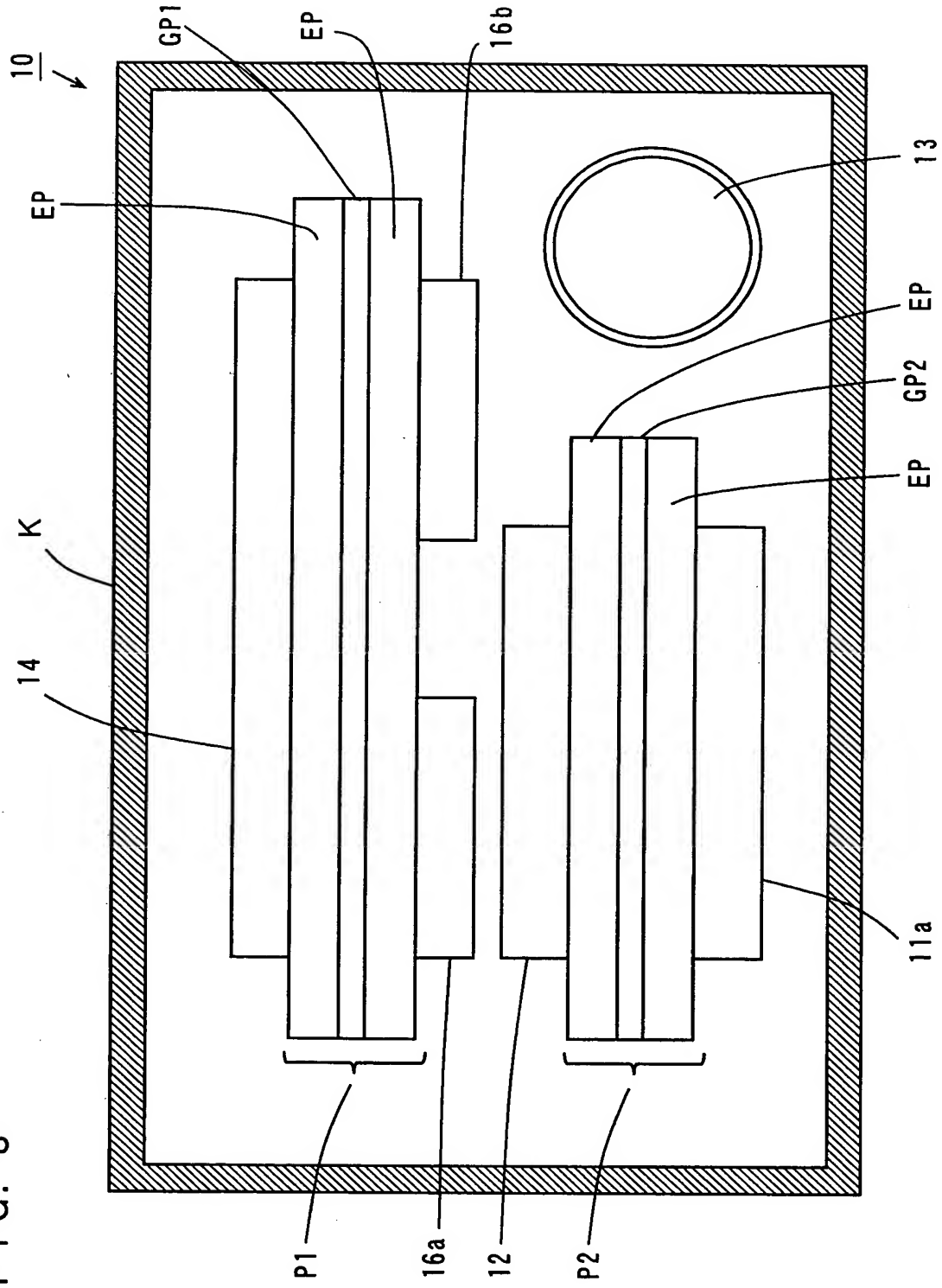


FIG. 9

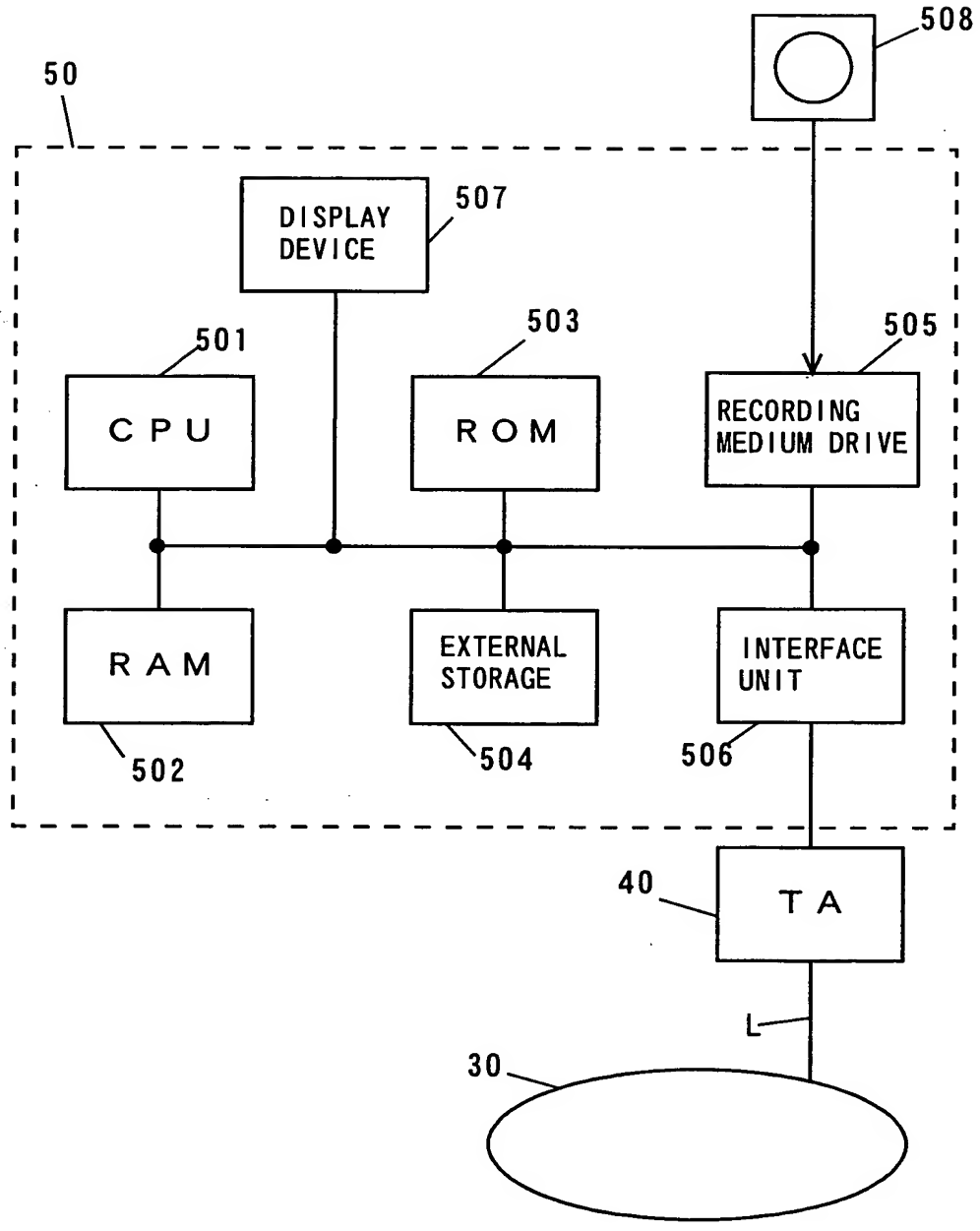

508
50
DISPLAY DEVICE
507
501
503
505
CPU
ROM
RECORDING MEDIUM DRIVE
RAM
EXTERNAL STORAGE
INTERFACE UNIT
502
504
506
40
TA
L
30

FIG. 10

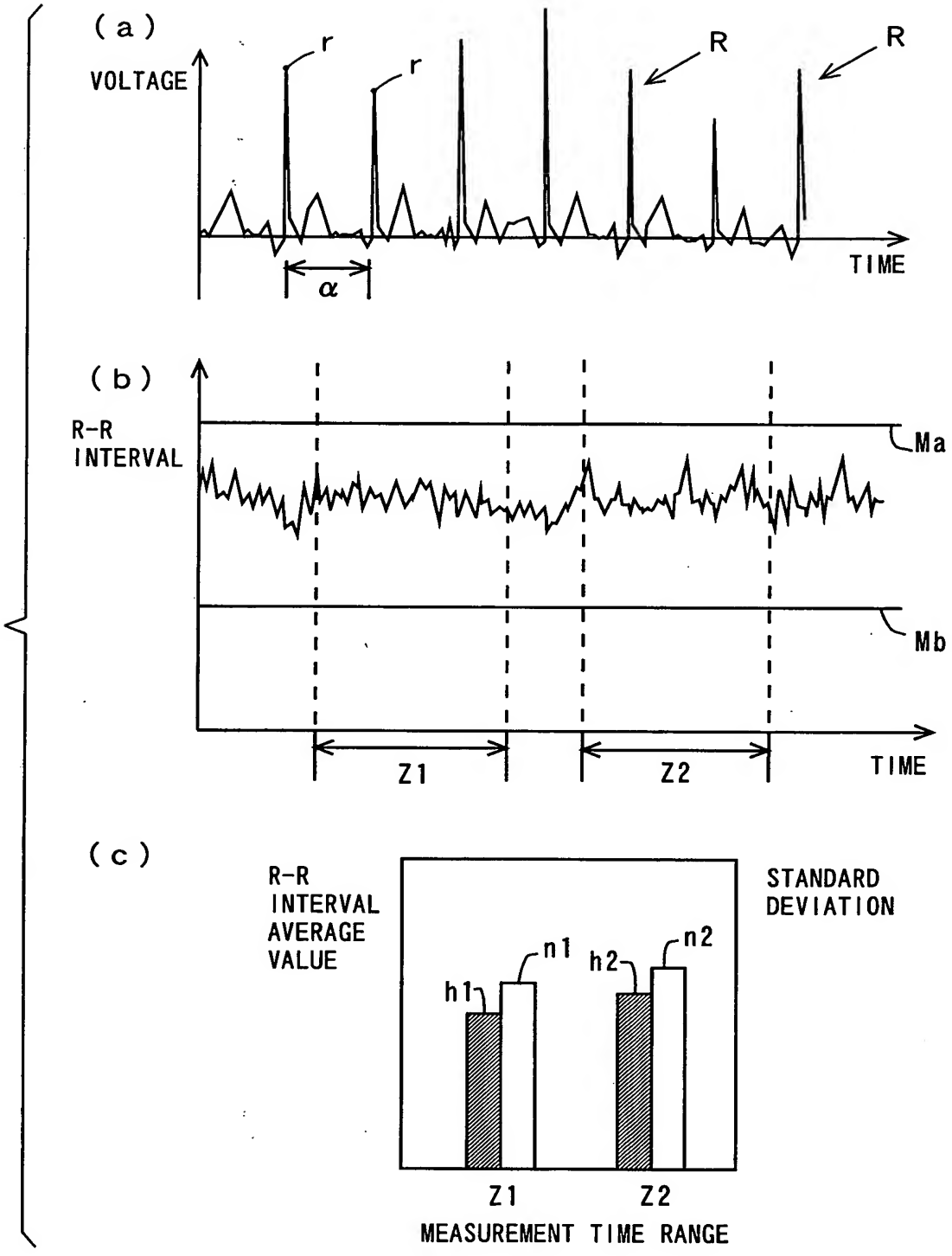

(a)
VOLTAGE
r
r
R
R
α
TIME
(b)
R-R
INTERVAL
Ma
Mb
Z1
Z2
TIME
(c)
R-R
INTERVAL
AVERAGE
VALUE
STANDARD
DEVIATION
h1
n1
h2
n2
Z1
Z2
MEASUREMENT TIME RANGE

FIG. 11

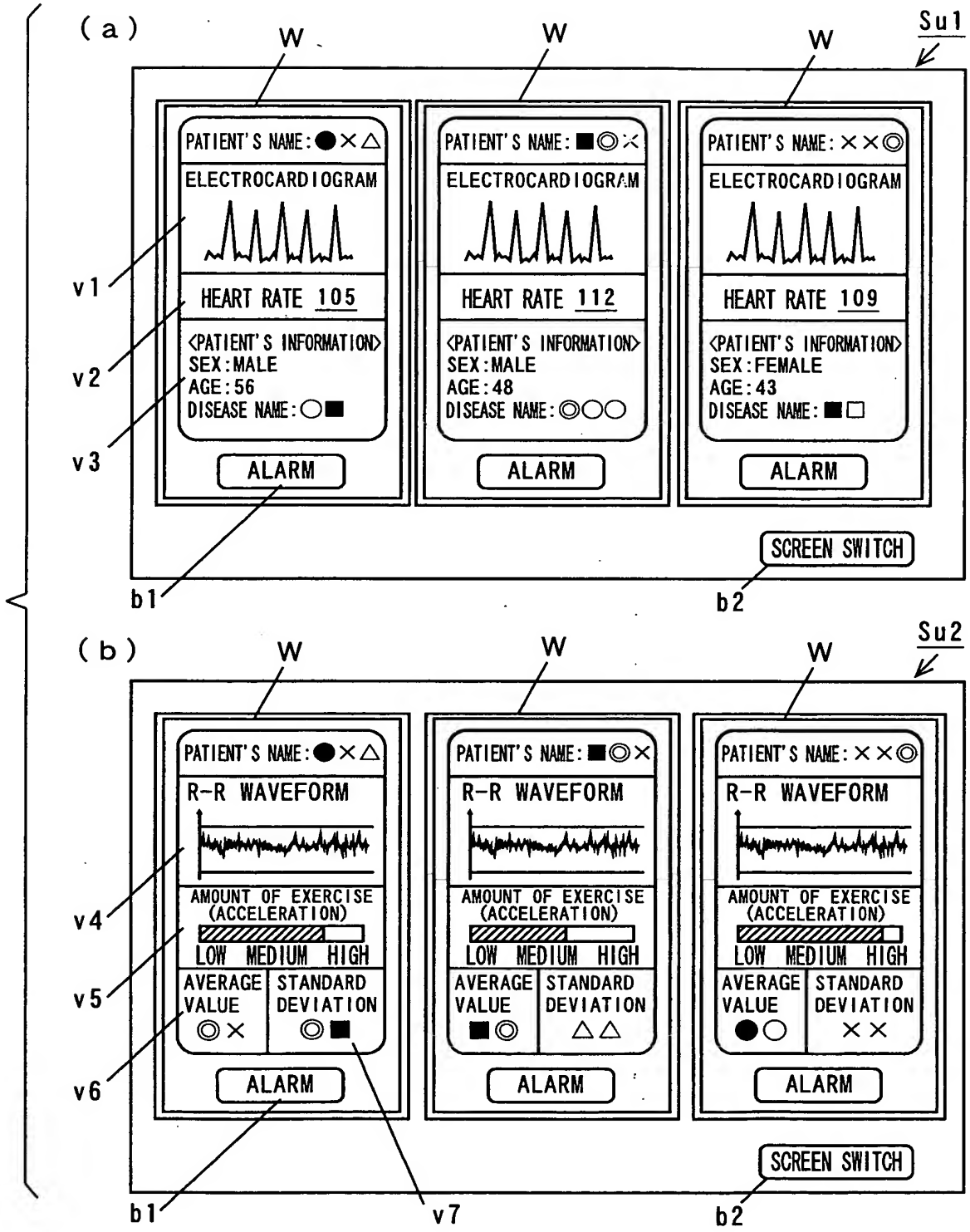

(a)
W
W
W
Su1
PATIENT'S NAME: ●×△
ELECTROCARDIOGRAM
HEART RATE 105
<PATIENT'S INFORMATION>
SEX:MALE
AGE:56
DISEASE NAME: ○■
ALARM
PATIENT'S NAME: ■◎×
ELECTROCARDIOGRAM
HEART RATE 112
<PATIENT'S INFORMATION>
SEX:MALE
AGE:48
DISEASE NAME: ◎○○
ALARM
PATIENT'S NAME: ××◎
ELECTROCARDIOGRAM
HEART RATE 109
<PATIENT'S INFORMATION>
SEX:FEMALE
AGE:43
DISEASE NAME: ■□
ALARM
SCREEN SWITCH
v1
v2
v3
b1
b2
(b)
W
W
W
Su2
PATIENT'S NAME: ●×△
R-R WAVEFORM
AMOUNT OF EXERCISE (ACCELERATION)
LOW MEDIUM HIGH
AVERAGE VALUE
STANDARD DEVIATION
◎×
◎■
ALARM
PATIENT'S NAME: ■◎×
R-R WAVEFORM
AMOUNT OF EXERCISE (ACCELERATION)
LOW MEDIUM HIGH
AVERAGE VALUE
STANDARD DEVIATION
■◎
△△
ALARM
PATIENT'S NAME: ××◎
R-R WAVEFORM
AMOUNT OF EXERCISE (ACCELERATION)
LOW MEDIUM HIGH
AVERAGE VALUE
STANDARD DEVIATION
●○
××
ALARM
SCREEN SWITCH
v4
v5
v6
v7
b1
b2

FIG. 12

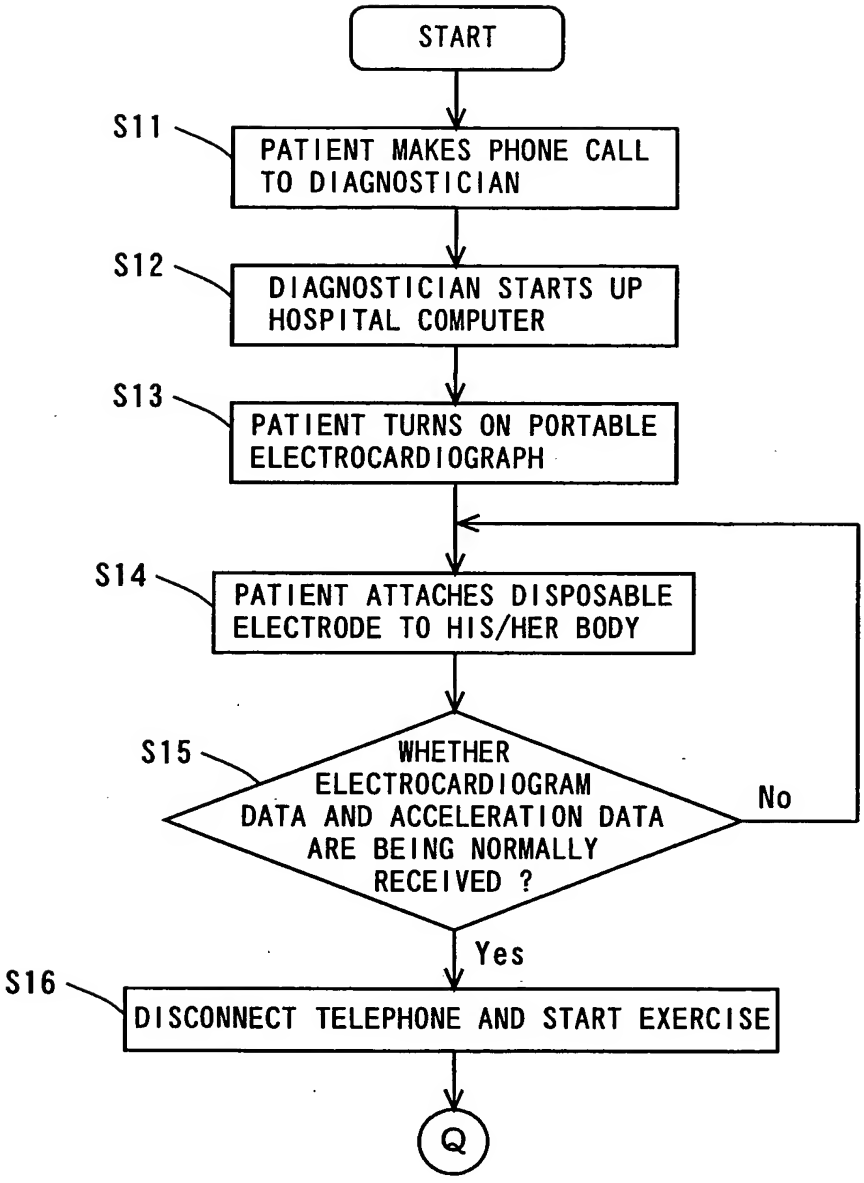

START
S11
PATIENT MAKES PHONE CALL TO DIAGNOSTICIAN
S12
DIAGNOSTICIAN STARTS UP HOSPITAL COMPUTER
S13
PATIENT TURNS ON PORTABLE ELECTROCARDIOGRAPH
S14
PATIENT ATTACHES DISPOSABLE ELECTRODE TO HIS/HER BODY
S15
WHETHER ELECTROCARDIOGRAM DATA AND ACCELERATION DATA ARE BEING NORMALLY RECEIVED ?
No
Yes
S16
DISCONNECT TELEPHONE AND START EXERCISE
Q

FIG. 13

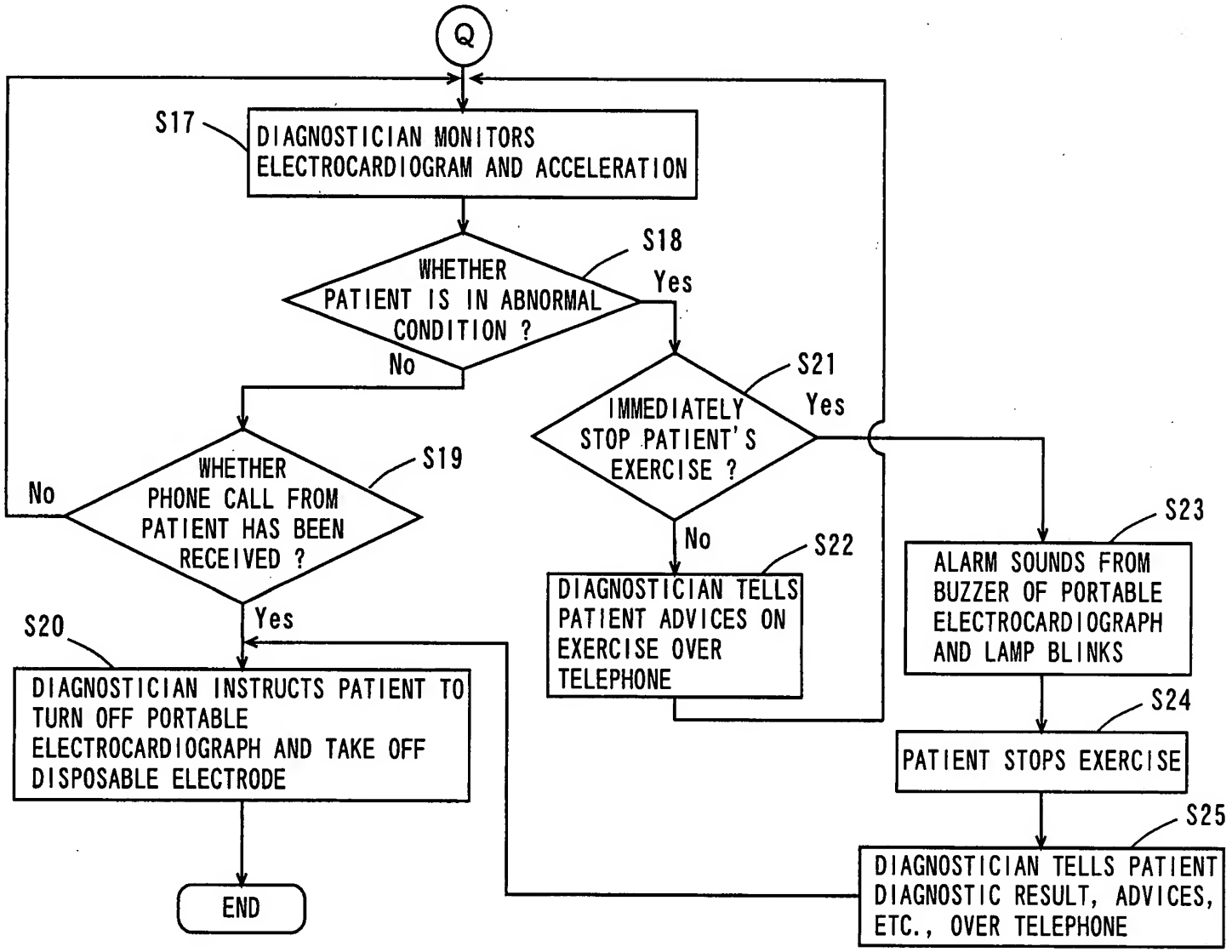

Q
S17
DIAGNOSTICIAN MONITORS ELECTROCARDIOGRAM AND ACCELERATION
S18
WHETHER PATIENT IS IN ABNORMAL CONDITION ?
Yes
No
S21
IMMEDIATELY STOP PATIENT'S EXERCISE ?
Yes
No
S19
WHETHER PHONE CALL FROM PATIENT HAS BEEN RECEIVED ?
No
Yes
S22
DIAGNOSTICIAN TELLS PATIENT ADVICES ON EXERCISE OVER TELEPHONE
S23
ALARM SOUNDS FROM BUZZER OF PORTABLE ELECTROCARDIOGRAPH AND LAMP BLINKS
S24
PATIENT STOPS EXERCISE
S25
DIAGNOSTICIAN TELLS PATIENT DIAGNOSTIC RESULT, ADVICES, ETC., OVER TELEPHONE
S20
DIAGNOSTICIAN INSTRUCTS PATIENT TO TURN OFF PORTABLE ELECTROCARDIOGRAPH AND TAKE OFF DISPOSABLE ELECTRODE
END

FIG. 14

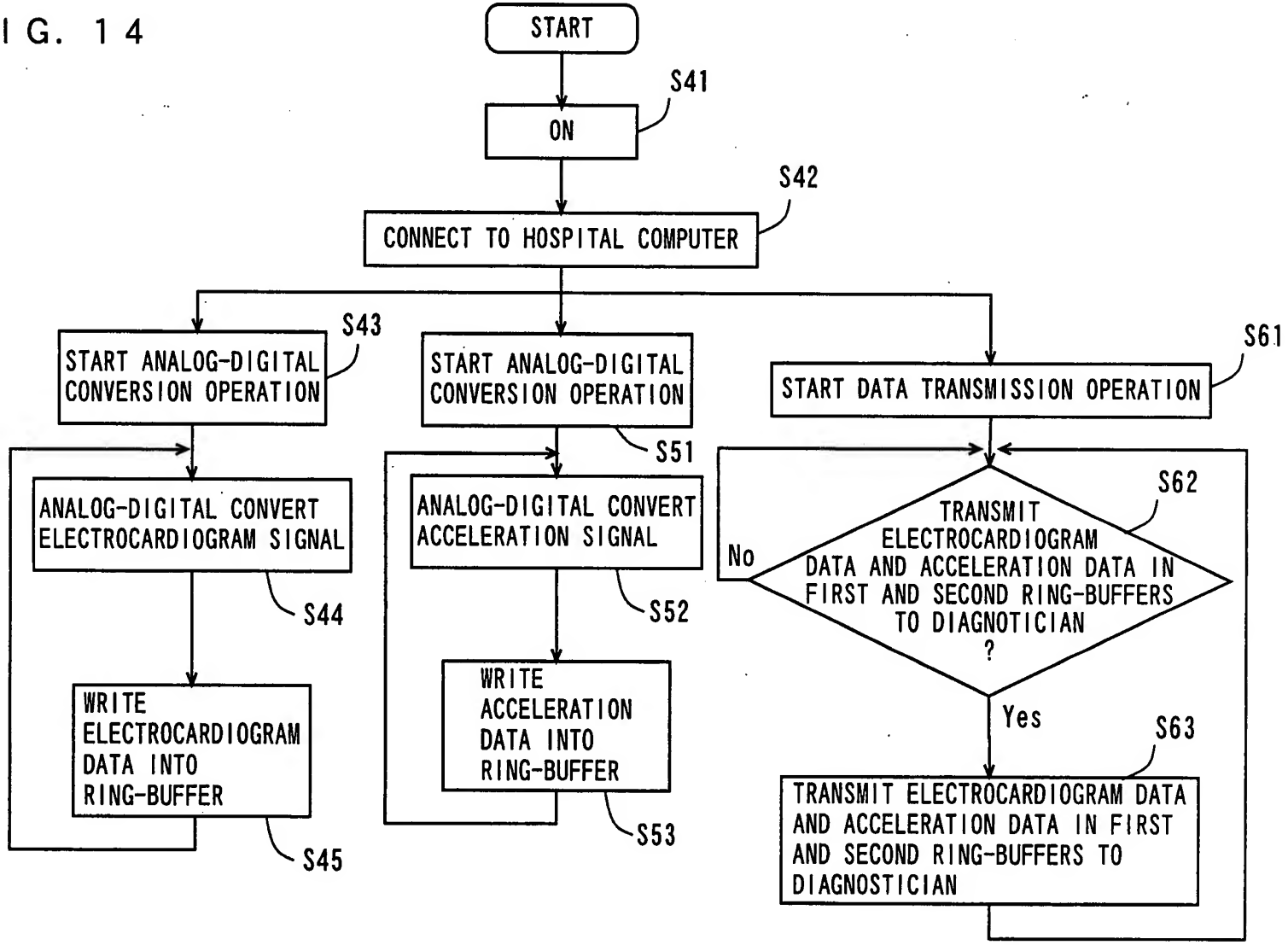

START
S41
ON
S42
CONNECT TO HOSPITAL COMPUTER
S43
START ANALOG-DIGITAL CONVERSION OPERATION
ANALOG-DIGITAL CONVERT ELECTROCARDIOGRAM SIGNAL
S44
WRITE ELECTROCARDIOGRAM DATA INTO RING-BUFFER
S45
START ANALOG-DIGITAL CONVERSION OPERATION
S51
ANALOG-DIGITAL CONVERT ACCELERATION SIGNAL
S52
WRITE ACCELERATION DATA INTO RING-BUFFER
S53
S61
START DATA TRANSMISSION OPERATION
S62
TRANSMIT ELECTROCARDIOGRAM DATA AND ACCELERATION DATA IN FIRST AND SECOND RING-BUFFERS TO DIAGNOTICIAN ?
No
Yes
S63
TRANSMIT ELECTROCARDIOGRAM DATA AND ACCELERATION DATA IN FIRST AND SECOND RING-BUFFERS TO DIAGNOSTICIAN

FIG. 15

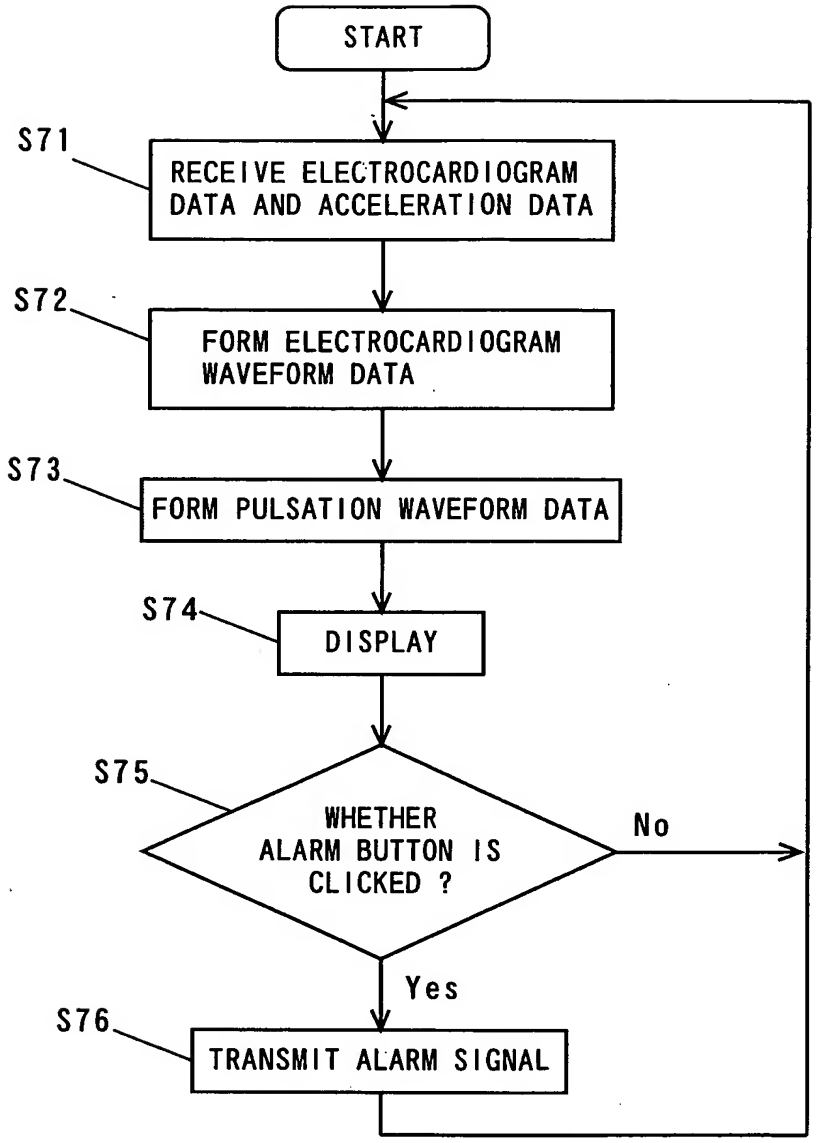
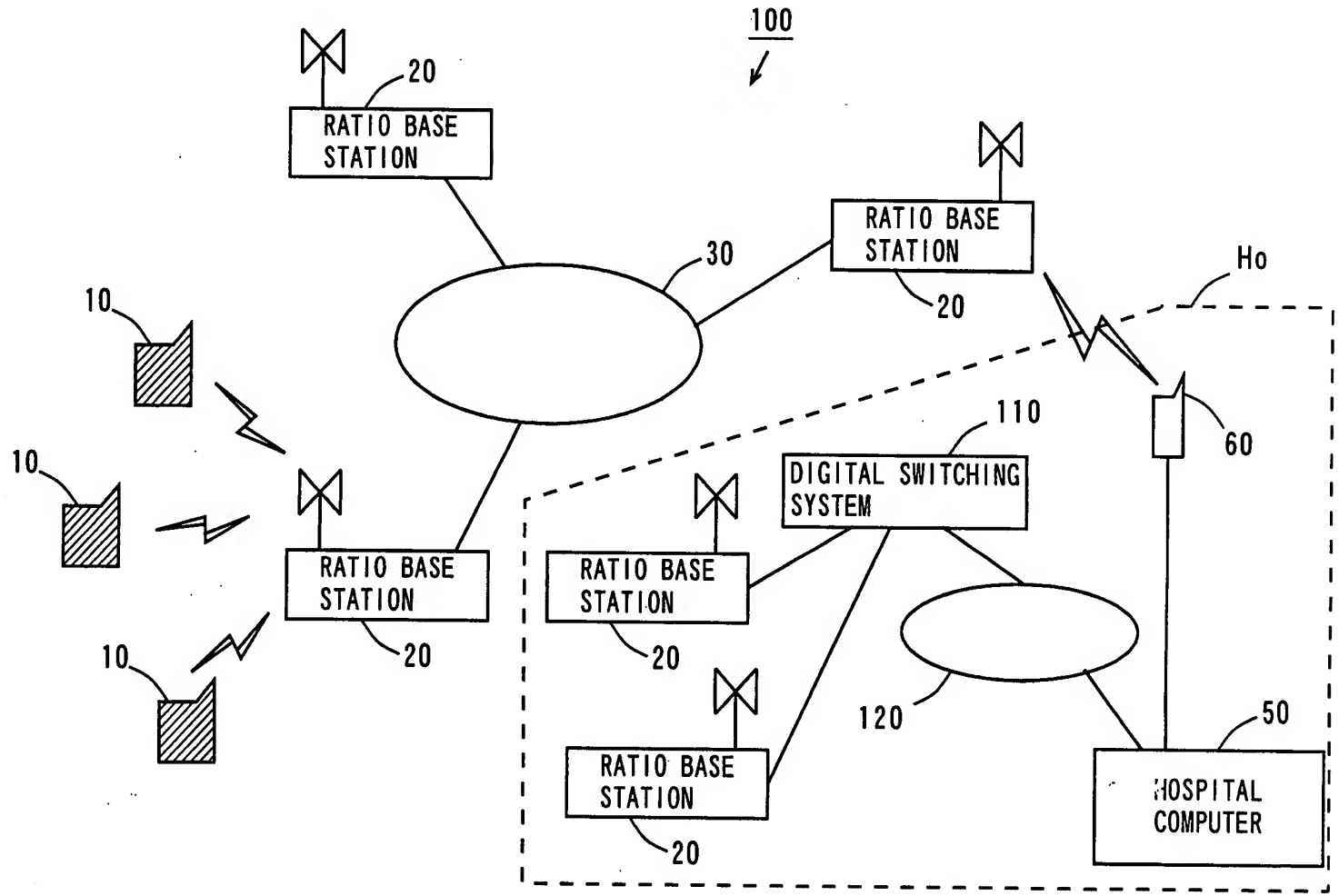

START
S71
RECEIVE ELECTROCARDIOGRAM DATA AND ACCELERATION DATA
S72
FORM ELECTROCARDIOGRAM WAVEFORM DATA
S73
FORM PULSATION WAVEFORM DATA
S74
DISPLAY
S75
WHETHER ALARM BUTTON IS CLICKED ?
No
Yes
S76
TRANSMIT ALARM SIGNAL

FIG. 16


100
20
RATIO BASE STATION
30
RATIO BASE STATION
20
Ho
10
10
10
RATIO BASE STATION
20
110
DIGITAL SWITCHING SYSTEM
60
RATIO BASE STATION
20
120
50
RATIO BASE STATION
20
HOSPITAL COMPUTER

F I G. 1 7

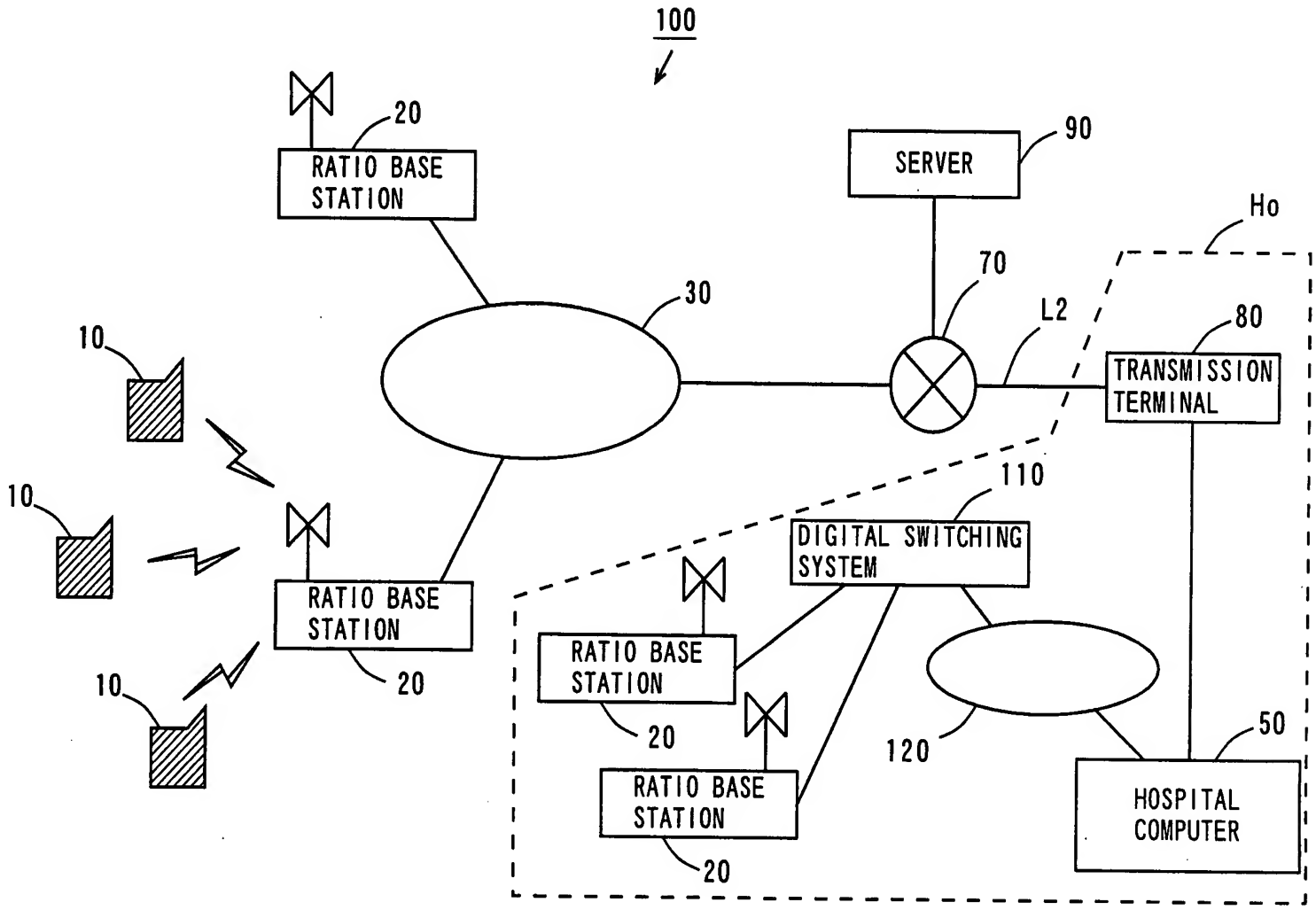
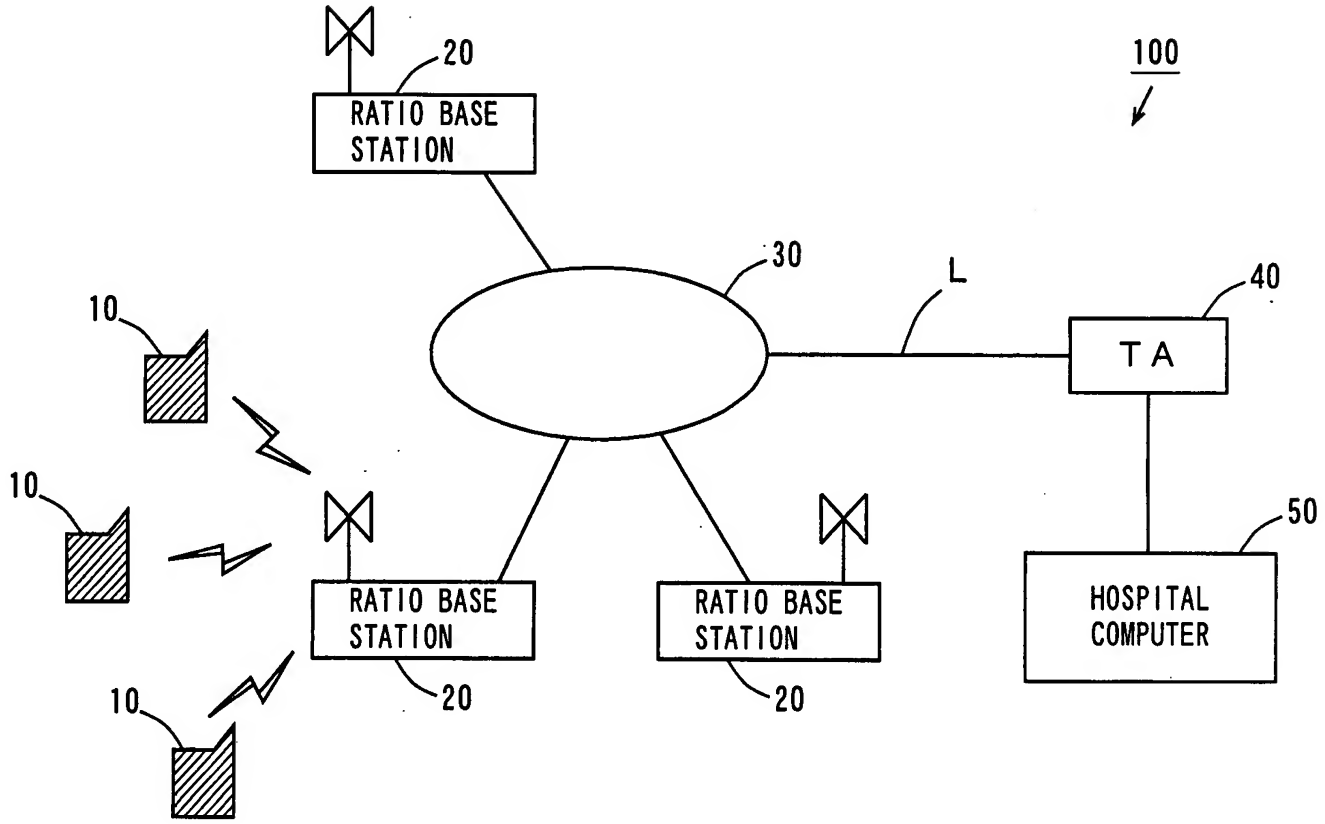

100
20
RATIO BASE STATION
SERVER
90
Ho
70
30
L2
80
TRANSMISSION TERMINAL
10
10
10
RATIO BASE STATION
20
110
DIGITAL SWITCHING SYSTEM
RATIO BASE STATION
20
RATIO BASE STATION
20
120
50
HOSPITAL COMPUTER

FIG. 18


100
20
RATIO BASE STATION
30
L
40
TA
10
10
10
RATIO BASE STATION
RATIO BASE STATION
20
20
50
HOSPITAL COMPUTER